

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
City Public Service

AUTHORIZING THE OPERATION OF  
VH Braunig Plant  
VH Braunig Power Plant  
Electric Services

LOCATED AT  
Bexar County, Texas  
Latitude 29° 15' 27" Longitude 98° 22' 58"  
Regulated Entity Number: RN100217835

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No:     O7     Issuance Date:     March 3, 2016    

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For the Commission

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## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 2 (Emissions Banking and Trading of Allowances) Requirements for an electric generating facility authorized under 30 TAC Chapter 116, Subchapter I:
  - (i) Title 30 TAC § 101.332 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.333 (relating to Allocation of Allowances)
  - (iii) Title 30 TAC § 101.334 (relating to Allowance Deductions)
  - (iv) Title 30 TAC § 101.335 (relating to Allowance Banking and Trading)
  - (v) Title 30 TAC § 101.336 (relating to Emission Monitoring and Compliance Demonstration and Reporting)
  - (vi) The terms and conditions by which the emission limits are established to meet the quantity of allowances for the electric generating facility are applicable requirements of this permit
- G. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 101.372 (relating to General Provisions)
  - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
  - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

- (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
  - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
  - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed either before or after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
  - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
  - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
  - (3) Records of all observations shall be maintained.
  - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible

emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or

monitoring was performed to demonstrate compliance with a different requirement.

- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
  - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
    - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
    - (2) Records of all observations shall be maintained.
    - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the



observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be

conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Permit holder shall comply with the following requirements for steam generators:
  - (i) Emissions from any oil or gas fuel-fired steam generator with a heat input capacity greater than 2,500 MMBtu per hour may not exceed 0.1 pound of TSP per MMBtu of heat input, averaged over a two-hour period, as required in 30 TAC § 111.153(c) (relating to Emissions Limits for Steam Generators).
- H. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
  - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)
  - (iv) Title 30 TAC § 111.211 (relating to Exception for Prescribed Burn)

- (v) Title 30 TAC § 111.213 (relating to Exception for Hydrocarbon Burning)
  - (vi) Title 30 TAC § 111.215 (relating to TCEQ Executive Director Approval of Otherwise Prohibited Outdoor Burning)
  - (vii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (viii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(c)(1).
  5. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
    - A. When filling gasoline storage vessels with a nominal capacity greater than 1,000 gallons (Stage I) at motor vehicle fuel dispensing facilities, which have dispensed no more than 25,000 gallons of gasoline in any calendar month after December 31, 2004, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
      - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
      - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
      - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
      - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)
  6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
    - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
    - B. Title 40 CFR § 60.8 (relating to Performance Tests)
    - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
    - D. Title 40 CFR § 60.12 (relating to Circumvention)

- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
  8. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
    - A. Title 40 CFR § 63.1111(e), for records of monthly throughput
    - B. Title 40 CFR § 63.1111(i), for compliance due to increase of throughput
    - C. Title 40 CFR § 63.1113(c), for compliance due to increase of throughput
    - D. Title 40 CFR § 63.1115(a), for operation of the source
    - E. Title 40 CFR § 63.1116(a) and (a)(1) - (4), for work practices
    - F. Title 40 CFR § 63.1116(b), for records availability
    - G. Title 40 CFR § 63.1116(d), for portable gasoline containers

### **Additional Monitoring Requirements**

9. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the “CAM Summary,” deviations as defined by the deviation limit in the “CAM Summary.” Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a

deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

- C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “CAM Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
  - D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
  - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

### **New Source Review Authorization Requirements**

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit

- C. Are not eligible for a permit shield
12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
  13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

### **Compliance Requirements**

14. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
15. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedule as required in 30 TAC § 117.9300 for electric utilities in East and Central Texas.
16. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) If applicable, offsets for Title 30 TAC Chapter 116

- (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
  - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
  - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
  - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
  - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

### **Protection of Stratospheric Ozone**

- 17. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
  - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
  - B. The permit holder shall comply with 40 CFR Part 82, Subpart F related to the disposal requirements for appliances using Class I or Class II (ozone-depleting) substances or non-exempt substitutes as specified in 40 CFR §§ 82.150 - 82.166 and the applicable Part 82 Appendices.

### **Temporary Fuel Shortages (30 TAC § 112.15)**

- 18. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:



- A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)
- B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)
- C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)
- D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

### **Permit Location**

- 19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### **Permit Shield (30 TAC § 122.148)**

- 20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

### **Acid Rain Permit Requirements**

- 21. For units P 1, P 2, P 3, P 5A, P 6A, CGT5, CGT6, CGT6, and CGT8 (identified in the Certificate of Representation as units 1, 2, 3, CTo1, CTo2, CGT5, CGT6, CGT7, and CGT8), located at the affected source identified by ORIS/Facility code 3612, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
  - A. General Requirements
    - (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.

- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

**B. Monitoring Requirements**

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO<sub>2</sub> and NO<sub>x</sub> under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

**C. SO<sub>2</sub> emissions requirements**

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO<sub>2</sub>.

- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO<sub>2</sub> for the previous calendar year.
- (iii) Each ton of SO<sub>2</sub> emitted in excess of the acid rain emissions limitations for SO<sub>2</sub> shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO<sub>2</sub> emissions requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
  - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO<sub>2</sub> in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO<sub>x</sub> Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO<sub>x</sub> under 40 CFR Part 76.

E. Excess emissions requirements for SO<sub>2</sub> and NO<sub>x</sub>.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
  - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
  - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
  - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
  - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
  - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under

the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.

H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:

- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
  - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
  - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
  - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
  - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO<sub>2</sub> allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

### **Clean Air Interstate Rule Permit Requirements**

22. For units P 1, P 2, P 3, P 5A, P 6A, CGT5, CGT6, CGT6, and CGT8, located at the site identified by ORIS/Facility code 3612, the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

#### **A. General Requirements**

- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
- (ii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.

- (iii) The owners and operators of the CAIR NO<sub>x</sub> and the CAIR SO<sub>2</sub> source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO<sub>x</sub> source with the CAIR NO<sub>x</sub> emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO<sub>2</sub> source with the CAIR SO<sub>2</sub> emissions limitation.

C. NO<sub>x</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO<sub>x</sub> unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or

the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).

- (iii) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (iv) CAIR NO<sub>x</sub> allowances shall be held in, deducted from or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in this CAIR permit.

D. NO<sub>x</sub> excess emissions requirement

- (i) If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, the owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO<sub>2</sub> emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, CAIR SO<sub>2</sub> allowances available for compliance deductions for the



control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.

- (ii) A CAIR SO<sub>2</sub> unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (iv) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in this CAIR permit.

F. SO<sub>2</sub> excess emissions requirements

- (i) If a CAIR SO<sub>2</sub> source emits sulfur dioxides during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, the owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.

- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and the CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
  - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO<sub>x</sub> designated representative for the source and each CAIR NO<sub>x</sub> unit and the CAIR SO<sub>2</sub> designated representative for the source and each CAIR SO<sub>2</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
  - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or relied upon for compliance determinations.
  - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program and CAIR SO<sub>2</sub> Trading Program.
- (ii) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source and a CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading

Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.

- H. The CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit shall meet the requirements of the CAIR SO<sub>2</sub> Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source or CAIR SO<sub>2</sub> source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR SO<sub>2</sub> Trading Program that applies to a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit or CAIR SO<sub>2</sub> unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source or CAIR NO<sub>x</sub> unit or a CAIR SO<sub>2</sub> source or CAIR SO<sub>2</sub> unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

### **Applicable Requirements Summary**

<b>Unit Summary .....</b>	<b>28</b>
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<b>Applicable Requirements Summary .....</b>	<b>31</b>
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Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
DG-1	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
DG-2	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
DG-3	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
EMGEN1	SRIC ENGINES	N/A	60IIII-1	40 CFR Part 60, Subpart IIII	No changing attributes.
EMGEN1	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FW-A	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FW-B	SRIC ENGINES	N/A	60IIII-1	40 CFR Part 60, Subpart IIII	No changing attributes.
FW-B	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FW-C	SRIC ENGINES	N/A	60IIII-1	40 CFR Part 60, Subpart IIII	No changing attributes.
FW-C	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
G-1	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-CGT	STATIONARY TURBINES	CGT5, CGT6, CGT7, CGT8	60KKKK-1	40 CFR Part 60, Subpart KKKK	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPSTACK2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	E-5, E-6	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-STACK3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	CGT5-STK, CGT6- STK, CGT7-STK, CGT8-STK	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-STACKS	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	E-1, E-2, E-3	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-STEAM	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	P-1, P-2, P-3	REG 2-1	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
GRP-STEAM	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	P-1, P-2, P-3	R7131-1	30 TAC Chapter 117, Subchapter E, Division 1	No changing attributes.
GRPSTEAM2	STATIONARY TURBINES	P-5A, P-6A	60GG-2	40 CFR Part 60, Subpart GG	No changing attributes.
GRPSTEAM3	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	P-5B, P-6B	60Db-1	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-VENTTK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	CGT5-PTK1, CGT5-PTK2, CGT5-PTK3, CGT6-PTK1,	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		CGT6-PTK2, CGT6-PTK3, CGT7-PTK1, CGT7-PTK2, CGT7-PTK3, CGT8-PTK1, CGT8-PTK2, CGT8-PTK3, P1- PTK1, P2-PTK2, P3-PTK3			
LOAD-T1	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
LOAD-T2-5	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.



## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
DG-1	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
DG-2	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
DG-3	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)- Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)- Table6.9.a.i § 63.6640(a)- Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
EMGEN1	EU	60III-1	CO	40 CFR Part 60,	§ 60.4205(b)	Owners and operators of	None	None	[G]§ 60.4214(d)

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Subpart IIII	§ 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
EMGEN1	EU	60III-1	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO <sub>x</sub> emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
EMGEN1	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder	None	None	[G]§ 60.4214(d)

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
EMGEN1	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
FW-A	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table 2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table 6.9.a.i § 63.6640(a)-Table 6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
FW-B	EU	60IIII-1	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4	Owners and operators of emergency stationary fire	None	None	[G]§ 60.4214(d)

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.			
FW-B	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
FW-B	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60	None	None	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
FW-C	E?U	60III-1	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NO <sub>x</sub> emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
FW-C	EU	60III-1	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
FW-C	EU	63ZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the	None	None	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
G-1	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(c)(1)	Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b).	** See Periodic Monitoring Summary	None	None
GRP-CGT	EU	60KKKK-1	NO <sub>x</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4335(b)(1) [G]§ 60.4345	New turbine firing fuels other than natural gas with a heat input at peak load of greater than 50 MMBtu/h and less than or equal to 850 MMBtu/h must meet the nitrogen oxides emission standard of 74 ppm at 15 percent O <sub>2</sub> .	§ 60.4335(b)(1) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(g) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-CGT	EU	60KKKK-1	SO <sub>2</sub>	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(a) § 60.4415(a) § 60.4415(a)(1) § 60.4415(a)(1)(i) § 60.4415(a)(1)(ii)	§ 60.4365(a)	§ 60.4375(a)
GRPSTACK2	EP	R1111-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRP-STACK3	EP	R1111-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRP-STACKS	EP	R1111-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-STEAM	EU	REG 2-1	SO <sub>2</sub>	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(a)	No person may cause, suffer, allow, or permit emissions of SO <sub>2</sub> from any liquid fuel-fired steam generator, furnace, or heater to exceed 440 ppmv at actual stack conditions and averaged over 3-hours.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
GRP-STEAM	EU	R7131-1	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter E, Division 1	§ 117.3020(c) § 117.3020(a) § 117.3020(b) § 117.3020(d) § 117.3020(e) § 117.3020(i) § 117.3020(j) § 117.3020(k) § 117.3020(l)	The annual average emission cap shall be calculated using the following equation.	§ 117.3020(d) § 117.3020(e) [G]§ 117.3020(e)(1) § 117.3020(h) § 117.3020(k) § 117.3040(a) § 117.3040(d) § 117.3040(d)(1) [G]§ 117.3040(d)(2) [G]§ 117.3040(d)(3) § 117.3040(h) § 117.3040(h)(1)	§ 117.3020(f) § 117.3045(a) [G]§ 117.3045(e)	§ 117.3020(g) § 117.3045(b) § 117.3045(b)(1) § 117.3045(b)(2) [G]§ 117.3045(c) [G]§ 117.3045(d) [G]§ 117.3054(a) [G]§ 117.3054(b) § 117.3054(c) § 117.3056
GRPSTEAM 2	EU	60GG-2	SO <sub>2</sub>	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
GRPSTEAM 2	EU	60GG-2	NO <sub>x</sub>	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3) ** See CAM Summary	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)
GRPSTEAM 3	EU	60Db-1	SO <sub>2</sub>	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1)



## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).			§ 60.49b(a)(3)
GRPSTEAM 3	EU	60Db-1	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPSTEAM 3	EU	60Db-1	PM (OPACITY)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPSTEAM 3	EU	60Db-1	NO <sub>x</sub>	40 CFR Part 60, Subpart Db	§ 60.44b(a)(4)(i) § 60.44b(h) § 60.44b(i) § 60.46b(a) § 60.48b(h)	Except as in §60.44b(k), (l), on/after §60.8 test, no facility combusting natural gas and distillate oil (duct burner in a combined cycle system) shall discharge NO <sub>x</sub> in excess of 86 ng/J heat input.	§ 60.46b(c) § 60.46b(f) [G]§ 60.46b(f)(1)	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b)
GRP-VENTTK	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream with a combined weight of the VOC or classes of compounds specified in § 115.121(c)(1)(B)-(C) of 100 lbs (45.4 kg), or less, in a	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(4)	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						continuous 24-hour period is exempt from § 115.121(c)(1).			
LOAD-T1	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
LOAD-T2-5	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

**Additional Monitoring Requirements**

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## CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRPSTEAM2	
Control Device ID No.: P-5A	Control Device Type: Selective Catalytic Reduction (SCR)
Control Device ID No.: P-6A	Control Device Type: Selective Catalytic Reduction (SCR)
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-2
Pollutant: NO <sub>x</sub>	Main Standard: § 60.332(a)(1)
<b>Monitoring Information</b>	
Indicator: NO <sub>x</sub> Concentration	
Minimum Frequency: four times per hour	
Averaging Period: 1-hour	
Deviation Limit: greater than 9.0 ppm when corrected to 15% oxygen except during periods of startup, shutdown or malfunction	
CAM Text: The CEMS shall be operated in accordance with 40 CFR Part 75 and performance specifications and QA/QC of 40 CFR Part 75	
Measure and record the nitrogen oxides concentration of the exhaust stream of the stack with a continuous emission monitoring system (CEMS). In addition, monitor the oxygen or carbon dioxide content of the flue gas with a CEMS.	

## Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: G-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: G-1	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1
Pollutant: VOC	Main Standard: § 115.112(c)(1)
<b>Monitoring Information</b>	
Indicator: Liquid Level	
Minimum Frequency: Once per day	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation any time the liquid level falls below the fill pipe level.	
Periodic Monitoring Text: Regardless of the location of the fill pipe, the fill pipe must be submerged at all times. Monitor and record the depth of the liquid using an automated/remote sounding device or liquid level sensing alarm/monitor. It shall be considered and reported as a deviation any time the liquid level falls below the fill pipe level.	

## Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPSTACK2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: Firing an alternative fuel for greater than 24 consecutive hours without conducting a visible emissions observation and a Test Method 9 is not performed; opacity greater than 15% avg. over six-minute period	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRP-STACK3	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: Firing an alternative fuel for greater than 24 consecutive hours without conducting a visible emissions observation and a Test Method 9 is not performed; opacity greater than 15% avg. over six-minute period	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	



## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRP-STACKS	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: Firing an alternative fuel for greater than 24 consecutive hours without conducting a visible emissions observation and a Test Method 9 is not performed; opacity greater than 15% avg. over a six-minute period	
<p>Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRP-STEAM	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG 2-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.9(a)
<b>Monitoring Information</b>	
Indicator: Sulfur content of liquid fuel	
Minimum Frequency: Quarterly when burning fuel oil and within 24 hours of a fuel change from primary fuel	
Averaging Period: N/A	
Deviation Limit: Burning fuel oil greater than 0.7% sulfur	
Periodic Monitoring Text: Measure and record the sulfur content of the liquid fuel oil according to 40 CFR Part 75 Appendix D requirements. Any monitoring data above the deviation limit shall be considered and reported as a deviation.	

**Permit Shield**

**Permit Shield .....50**

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
AP4OT1	N/A	30 TAC Chapter 115, Storage of VOCs	VOC true vapor pressure is less than 1.5 psia
AP4OT1	N/A	40 CFR Part 60, Subpart K	Tank was constructed or modified prior to 1973
DG-1	N/A	40 CFR Part 60, Subpart IIII	This stationary compression ignition internal combustion engine was constructed before July 11, 2005, and has not been modified or reconstructed.
DG-2	N/A	40 CFR Part 60, Subpart IIII	This stationary compression ignition internal combustion engine was constructed before July 11, 2005, and has not been modified or reconstructed.
DG-3	N/A	40 CFR Part 60, Subpart IIII	This stationary compression ignition internal combustion engine was constructed after July 11, 2005, but was manufactured before April 1, 2006 and is not a fire pump engine.
FW-A	N/A	40 CFR Part 60, Subpart IIII	This stationary compression ignition internal combustion engine was constructed before July 11, 2005, and has not been modified or reconstructed.
GRP-TANK1	AP4DG1, AP4DG3, AP4EL1, AP4KE1, AP4LO1, AP4LO2,	30 TAC Chapter 115, Storage of VOCs	VOC true vapor pressure is less than 1.5 psia

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
	AP4LO3, AP4LO4, AP4NA1		
GRP-TANK1	AP4DG1, AP4DG3, AP4EL1, AP4KE1, AP4LO1, AP4LO2, AP4LO3, AP4LO4, AP4NA1	40 CFR Part 60, Subpart K	Tanks were constructed or modified prior to 1973
GRP-TANK2	AP4DF1, AP4FD2, AP4FD3, AP4KE2	30 TAC Chapter 115, Storage of VOCs	VOC true vapor pressure is less than 1.5 psia
GRP-TANK2	AP4DF1, AP4FD2, AP4FD3, AP4KE2	40 CFR Part 60, Subpart K	Tanks have a storage capacity of less than 40,000 gallons
GRP-TANK3	AP4OT2, AP4OT3, AP4OT4, AP4OT5	30 TAC Chapter 115, Storage of VOCs	VOC true vapor pressure is less than 1.5 psia
GRP-TANK3	AP4OT2, AP4OT3, AP4OT4, AP4OT5	40 CFR Part 60, Subpart K	Fuel oil does not meet the definition of a petroleum liquid in 60.110(b)
GRP-TANK4	AP4FD1, AP4WO1, AP4WO2, TK-DT, TK-LOR1, TK-LOR2, TK-LOR3, TK-ST	30 TAC Chapter 115, Storage of VOCs	VOC true vapor pressure is less than 1.5 psia
GRP-TANK4	AP4FD1, AP4WO1, AP4WO2, TK-DT, TK-LOR1, TK-LOR2, TK-LOR3, TK-ST	40 CFR Part 60, Subpart Kb	Tanks have a storage capacity of less than 19,800 gallons
LOAD-MV	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Unit is a motor vehicle fuel dispensing facility as defined by 30 TAC 101.1.

**New Source Review Authorization References**

**New Source Review Authorization References ..... 53**

**New Source Review Authorization References by Emission Unit..... 55**

## New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: PSDTX1095	Issuance Date: 12/06/2011
PSD Permit No.: PSDTX907	Issuance Date: 12/22/2015
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 38183	Issuance Date: 12/22/2015
Authorization No.: 45641	Issuance Date: 01/27/2012
Authorization No.: 81903	Issuance Date: 12/06/2011
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.102	Version No./Date: 09/04/2000
Number: 106.103	Version No./Date: 09/04/2000
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.123	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.242	Version No./Date: 09/04/2000
Number: 106.244	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.316	Version No./Date: 09/04/2000
Number: 106.317	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 03/14/1997
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000

### **New Source Review Authorization References**

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Number: 106.473	Version No./Date: 09/04/2000
Number: 106.474	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 11/01/2001
Number: 106.531	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 03/14/1997
Number: 3	Version No./Date: 11/25/1985
Number: 3	Version No./Date: 09/13/1993
Number: 5	Version No./Date: 09/17/1973
Number: 7	Version No./Date: 04/04/1975
Number: 51	Version No./Date: 07/20/1992
Number: 53	Version No./Date: 07/20/1992
Number: 70	Version No./Date: 06/07/1996
Number: 103	Version No./Date: 06/07/1996



### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
AP4DF1	CAR SHED DIESEL TANK	106.472/03/14/1997
AP4DG1	DIESEL FUEL TANK	106.472/03/14/1997
AP4DG3	DIESEL FUEL TANK	106.472/03/14/1997
AP4EL1	ENGINE LUBE OIL TANK - LUBE OIL SHED	106.472/03/14/1997
AP4FD1	DIESEL FUEL TANK	106.472/03/14/1997
AP4FD2	DIESEL FUEL TANK	106.472/03/14/1997
AP4FD3	DIESEL FUEL TANK	106.472/03/14/1997
AP4KE1	KEROSENE TANK - LUBE OIL SHED	106.472/03/14/1997
AP4KE2	KEROSENE TANK - LUBE OIL SHED	106.472/03/14/1997
AP4LO1	TURBINE LUBE OIL TANK	106.472/03/14/1997
AP4LO2	TURBINE LUBE OIL TANK	106.472/03/14/1997
AP4LO3	TURBINE LUBE OIL TANK	106.472/03/14/1997
AP4LO4	TURBINE LUBE OIL TANK	106.472/03/14/1997
AP4NA1	NAPHTHA TANK - LUBE OIL SHED	106.472/03/14/1997
AP4OT1	FUEL OIL TANK (TK-DSL1)	106.472/03/14/1997
AP4OT2	FUEL OIL TANK	106.472/03/14/1997
AP4OT3	FUEL OIL TANK	106.472/03/14/1997
AP4OT4	FUEL OIL TANK	106.472/03/14/1997

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
AP4OT5	FUEL OIL TANK	106.472/03/14/1997
AP4WO1	WASTE OIL TANK	106.472/03/14/1997
AP4WO2	WASTE OIL TANK	106.472/03/14/1997
CGT5	COMBUSTION TURBINE 5	81903, PSDTX1095
CGT5-PTK1	PROCESS TANK VENT	106.472/09/04/2000
CGT5-PTK2	PROCESS TANK VENT	106.472/09/04/2000
CGT5-PTK3	PROCESS TANK VENT	106.472/09/04/2000
CGT5-STK	COMBUSTION TURBINE 5 STACK	81903, PSDTX1095
CGT6	COMBUSTION TURBINE 6	81903, PSDTX1095
CGT6-PTK1	PROCESS TANK VENT	106.472/09/04/2000
CGT6-PTK2	PROCESS TANK VENT	106.472/09/04/2000
CGT6-PTK3	PROCESS TANK VENT	106.472/09/04/2000
CGT6-STK	COMBUSTION TURBINE 6 STACK	81903, PSDTX1095
CGT7	COMBUSTION TURBINE 7	81903, PSDTX1095
CGT7-PTK1	PROCESS TANK VENT	106.472/09/04/2000
CGT7-PTK2	PROCESS TANK VENT	106.472/09/04/2000
CGT7-PTK3	PROCESS TANK VENT	106.472/09/04/2000
CGT7-STK	COMBUSTION TURBINE 7 STACK	81903, PSDTX1095

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
CGT8	COMBUSTION TURBINE 8	81903, PSDTX1095
CGT8-PTK1	PROCESS TANK VENT	106.472/09/04/2000
CGT8-PTK2	PROCESS TANK VENT	106.472/09/04/2000
CGT8-PTK3	PROCESS TANK VENT	106.472/09/04/2000
CGT8-STK	COMBUSTION TURBINE 8 STACK	81903, PSDTX1095
DG-1	EMERGENCY ENGINE 1	106.511/09/04/2000
DG-2	EMERGENCY ENGINE 2	106.511/09/04/2000
DG-3	EMERGENCY ENGINE 3	106.511/09/04/2000
E-1	STEAM GENERATOR STACK 1	45641
E-2	STEAM GENERATOR STACK 2	45641
E-3	STEAM GENERATOR STACK 3	45641
E-5	COMBUSTION TURBINE/HRSG/DB-STACK1	38183, PSDTX907
E-6	COMBUSTION TURBINE/ HRSG/ DB-STACK2	38183, PSDTX907
EMGEN1	EMERGENCY GENERATOR	81903, PSDTX1095
FW-A	FIRE WATER PUMP A	106.511/09/04/2000
FW-B	FIRE WATER PUMP B	106.511/09/04/2000
FW-C	FIRE WATER PUMP C	106.511/09/04/2000
G-1	UNDERGROUND GASOLINE STORAGE TANK	053/07/20/1992

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
LOAD-MV	MOTOR VEHICLE LOADING AT TANK G-1	106.412/09/04/2000
LOAD-T1	FUEL OIL LOADING AT TANK 1 (AP4OT1)	106.472/09/04/2000
LOAD-T2-5	FUEL OIL LOADING AT TANKS 2, 3, 4, 5 (AP4OT2 - 5)	106.472/09/04/2000
P1-PTK1	PROCESS TANK VENT	106.472/09/04/2000
P-1	STEAM GENERATOR UNIT 1	45641
P2-PTK2	PROCESS TANK VENT	106.472/09/04/2000
P-2	STEAM GENERATOR UNIT 2	45641
P3-PTK3	PROCESS TANK VENT	106.472/09/04/2000
P-3	STEAM GENERATOR UNIT 3	45641
P-5A	COMBUSTION TURBINE 1	38183, PSDTX907
P-5B	HRSG/DB1	38183, PSDTX907
P-6A	COMBUSTION TURBINE 2	38183, PSDTX907
P-6B	HRSG/DB2	38183, PSDTX907
TK-DT	LUBE OIL TANK	106.472/03/14/1997
TK-LOR1	LUBE OIL TANK	106.472/03/14/1997
TK-LOR2	LUBE OIL TANK	106.472/03/14/1997
TK-LOR3	LUBE OIL TANK	106.472/03/14/1997
TK-ST	LUBE OIL TANK	106.472/03/14/1997

## Appendix A

Acronym List .....	60
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## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM .....	actual cubic feet per minute
AMOC .....	alternate means of control
ARP .....	Acid Rain Program
ASTM .....	American Society of Testing and Materials
B/PA .....	Beaumont/Port Arthur (nonattainment area)
CAM .....	Compliance Assurance Monitoring
CD .....	control device
COMS .....	continuous opacity monitoring system
CVS .....	closed-vent system
D/FW .....	Dallas/Fort Worth (nonattainment area)
DR .....	Designated Representative
ELP .....	El Paso (nonattainment area)
EP .....	emission point
EPA .....	U.S. Environmental Protection Agency
EU .....	emission unit
FCAA Amendments .....	Federal Clean Air Act Amendments
FOP .....	federal operating permit
GF .....	grandfathered
gr/100 scf .....	grains per 100 standard cubic feet
HAP .....	hazardous air pollutant
H/G/B .....	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S .....	hydrogen sulfide
ID No. ....	identification number
lb/hr .....	pound(s) per hour
MMBtu/hr .....	Million British thermal units per hour
MRRT .....	monitoring, recordkeeping, reporting, and testing
NA .....	nonattainment
N/A .....	not applicable
NADB .....	National Allowance Data Base
NO <sub>x</sub> .....	nitrogen oxides
NSPS .....	New Source Performance Standard (40 CFR Part 60)
NSR .....	New Source Review
ORIS .....	Office of Regulatory Information Systems
Pb .....	lead
PBR .....	Permit By Rule
PM .....	particulate matter
ppmv .....	parts per million by volume
PSD .....	prevention of significant deterioration
RO .....	Responsible Official
SO <sub>2</sub> .....	sulfur dioxide
TCEQ .....	Texas Commission on Environmental Quality
TSP .....	total suspended particulate
TVP .....	true vapor pressure
U.S.C. ....	United States Code
VOC .....	volatile organic compound

**Appendix B**

**Major NSR Summary Table ..... 62**

Permit Number: 81903 and PSDTX1095 Issuance Date: 12/06/2011							
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**			
CGT5, CGT6, CGT7, CGT8, E-2 (5)	Total Cap for NO <sub>x</sub> all 5 EPNs	NO <sub>x</sub>	-	174.96	2, 15, 16	2, 15, 16, 22, 23	2, 15, 16, 24
CGT5, CGT6, CGT7, CGT8 (6)	GE LM 6000 (50 MW) Natural Gas (up to 4750 hr/yr)	NO <sub>x</sub>	9.09	-	2, 15, 16	2, 15, 16, 22, 23	2, 15, 16, 24
		NO <sub>x</sub> (MSS) (8)	150.30	-	2, 16	2, 16, 23	2, 16, 24
		CO	9.96	-	15, 16	15, 16, 22, 23	15, 16, 24
		CO (MSS) (8)	885.0	-	16	16, 23	16, 24
		VOC	1.90	-	15, 17	15, 17, 22, 23	15
		VOC (MSS) (8)	14.80	-	17	17, 23	
		PM/PM <sub>10</sub>	8.0	-	6, 15, 17	6, 15, 17, 22, 23	15
		SO <sub>2</sub>	6.46	-	2, 5, 15, 17	2, 5, 15, 17, 22, 23	15
		NH <sub>3</sub>	4.70	-	15, 18	15, 18, 22, 23	15
		H <sub>2</sub> SO <sub>4</sub>	0.49	-	5, 17	5, 17, 23	
	Fuel Oil (up to 720 hr/yr)	NO <sub>x</sub>	29.29	-	2, 15, 16	2, 15, 16, 22, 23	2, 15, 16, 24
		NO <sub>x</sub> (MSS) (8)	207.40	-	2, 16	2, 16, 23	2, 16, 24
		CO	10.03	-	15, 16	15, 16, 22, 23	15, 16, 24
		CO (MSS) (8)	891.0	-	16	16, 23	16, 24
		VOC	2.55	-	15, 17	15, 17, 22, 23	15
		VOC (MSS) (8)	14.9	-	17	17, 23	
		PM/PM <sub>10</sub>	30.0	-	6, 15, 17	6, 15, 17, 22, 23	15
		SO <sub>2</sub>	23.04	-	2, 15, 17	2, 15, 17, 22, 23	15
		NH <sub>3</sub>	4.74	-	15, 18	15, 18, 22, 23	15
		H <sub>2</sub> SO <sub>4</sub>	17.63	-	17	17, 23	



**Permit Number: 81903 and PSDTX1095 Issuance Date: 12/06/2011**

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**			
CGT5, CGT6, CGT7, CGT8 (7)	Annual Emissions (Natural Gas/Fuel Oil) (4750 hr/yr)	NO <sub>x</sub>	-	28.90	2, 15, 16	2, 15, 16, 22, 23	2, 15, 16, 24
		CO	-	23.70	15, 16	15, 16, 22, 23	15, 16, 24
		VOC	-	4.70	15, 17	15, 17, 22, 23	15
		PM/PM <sub>10</sub>	-	26.90	6, 15, 17	6, 15, 17, 22, 23	15
		SO <sub>2</sub>	-	9.60	2, 5, 15, 17	2, 5, 15, 17, 22, 23	15
		NH <sub>3</sub>	-	11.20	15, 18	15, 18, 22, 23	15
		H <sub>2</sub> SO <sub>4</sub>	-	7.30	5, 17	5, 17, 23	
EMGEN1	Emergency Generator (1,333-hp)	NO <sub>x</sub>	31.99	8.0	19	19, 23	
		CO	7.33	1.83	19	19, 23	
		VOC	0.94	0.23	19	19, 23	
		PM/PM <sub>10</sub>	0.93	0.23	6, 19	6, 19, 23	
		SO <sub>2</sub>	0.54	0.13	5, 19	5, 19, 23	
CGT-LOV	Combustion Turbine Lube Oil Vents	PM <sub>10</sub>	0.03	0.11	6	6, 23	
FUG-CGT	Plant Fugitives	VOC	0.21	0.93			
		NH <sub>3</sub>	0.02	0.10	10	10, 23	
TK-DSL1	Diesel Tank 1 (combustion turbines)	VOC	4.90	0.37	20	20, 23	
TK-DSL2	Diesel Tank 2 (emergency generator)	VOC	0.082	0.001	20	20, 23	

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- CO - carbon monoxide
- H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- NH<sub>3</sub> - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Cap based upon the baseline actual emissions for Boiler E-2 (authorized by Permit Number 45641).
- (6) Pounds per hour - apply to each turbine.
- (7) Tons per year – apply to each turbine and include normal operation, maintenance, start-up, and shutdown.
- (8) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, during any clock hour that includes one or more minutes of planned MSS activities, the pollutant's hourly emission limits that apply during planned MSS activities shall apply during that clock hour.

**Permit Number:38183 and PSDTX907 Issuance Date: 12/22/2015**

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
E5	Combustion Gas Turbine (5) 186 MW Output and HRSG w/166.7 MMBtu/hr Duct Burner	NO <sub>x</sub>	68.7	271.2	10, 12, 13, 15, 18	10, 12, 13, 15, 18, 26, 27	10, 12, 13, 28, 30
		NO <sub>x</sub> (MSS)(5)	687.00	-	10, 12, 13, 15, 23, 24	10, 12, 13, 15, 23, 24, 26, 27	10, 12, 28, 30
		CO	124.8	480.4	12, 13, 15, 18	12, 13, 15, 18, 26, 27	12, 13, 28, 30
		CO(MSS)(5)	2000.00	-	12, 13, 15, 23, 24	12, 13, 15, 23, 24, 26, 27	12, 28, 30
		SO <sub>2</sub>	58.3	23.8	5, 12, 15, 16, 18, 23	5, 10, 12, 15, 18, 26, 27	10, 12
		VOC	18.5	48.1	12, 15, 23	12, 15, 23, 26, 27	12
		PM/PM <sub>10</sub>	26.5	88.6	9, 12, 15, 23	9, 10, 12, 15, 23, 26, 27	10, 12
		NH <sub>3</sub>	28.2	57.6	12, 17, 23	12, 17, 23, 26, 27	12
E6	Combustion Gas Turbine (5) 186 MW Output and HRSG w/166.7 MMBtu/hr Duct Burner	NO <sub>x</sub>	68.7	271.2	10, 12, 13, 15, 18	10, 12, 13, 15, 18, 26, 27	10, 12, 13, 28, 30
		NO <sub>x</sub> (MSS)(5)	687.00	-	10, 12, 13, 15, 23, 24	10, 12, 13, 15, 23, 24, 26, 27	10, 12, 28, 30
		CO	124.8	480.4	12, 13, 15, 18	12, 13, 15, 18, 26, 27	12, 13, 28, 30
		CO(MSS)(5)	2000.00	-	12, 13, 15, 23, 24	12, 13, 15, 23, 24, 26, 27	12, 28, 30
		SO <sub>2</sub>	58.3	23.8	5, 12, 15, 16, 18, 23	5, 10, 12, 15, 18, 26, 27	10, 12
		VOC	18.5	48.1	12, 15, 23	12, 15, 23, 26, 27	12

Permit Number:38183 and PSDTX907    Issuance Date: 12/22/2015							
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM/PM <sub>10</sub>	26.5	88.6	9, 12, 15, 23	9, 10, 12, 15, 23, 26, 27	10, 12
		NH <sub>3</sub>	28.2	57.6	12, 17, 23	12, 17, 23, 26, 27	12
PFUG	Piping Fugitives	VOC (6)	0.17	0.76			
MSSFUG (7)	Maintenance Activities	VOC	14.27	0.05	23	23, 27	
		PM	65.65	0.20		27	
		PM <sub>10</sub>	31.05	0.09		27	
		PM <sub>2.5</sub>	4.70	0.01		27	
		NO <sub>x</sub>	<0.01	<0.01		27	
		CO	<0.01	<0.01		27	
		SO <sub>2</sub>	<0.01	<0.01		27	
		NH <sub>3</sub>	7.67	<0.01	23	23, 27	
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:							
92580							
CT01	Air Inlet Chillers EPN E5	VOC	0.29	1.30			
		SO <sub>2</sub>	0.06	0.26			
		CO	0.08	0.36			
		NO <sub>x</sub>	0.59	2.59			
		PM/PM <sub>10</sub>	0.77	3.38			
92592							
CT02	Air Inlet Chillers EPN E6	VOC	0.04	0.16			
		SO <sub>2</sub>	3.95	0.28			
		CO	0.44	0.40			

Permit Number:38183 and PSDTX907 Issuance Date: 12/22/2015							
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		NO <sub>x</sub>	3.96	2.71			
		PM/PM <sub>10</sub>	0.59	2.27			
		PM <sub>2.5</sub>	0.59	2.27			
		NH <sub>3</sub>	0.04	0.05			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- NH<sub>3</sub> - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, during any clock hour that includes one or more minutes of planned MSS activities, the pollutant's hourly emission limits that apply during planned MSS activities shall apply during that clock hour.
- (6) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (7) Planned site-wide Miscellaneous Maintenance Activities (EPN MSSFUG) for Permit No. 81903 are authorized under this MAERT.

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

December 6, 2011

MS KIM STOKER  
ENVIRONMENTAL MANAGER  
CITY PUBLIC SERVICE  
PO BOX 1771  
SAN ANTONIO TX 78296-1771

Re: Permit Amendment Application  
Permit Number: 81903  
Simple Cycle Combustion Turbine  
Elmendorf, Bexar County  
Regulated Entity Number: RN100217835  
Customer Reference Number: CN600129019  
Account Number: BG-0186-I  
Associated Permit Number: PSDTX1095

Dear Ms. Stoker:

This is in response to your letter received January 4, 2011 and your Form PI-1 (General Application for Air Preconstruction Permits and Amendments) concerning the proposed amendment to Permit Number 81903. We understand that you propose to amend your permit to authorize planned maintenance, startup and shutdown activities at the Braunig Electric Generating Station near Elmendorf, Bexar County, Texas.

As indicated in Title 30 Texas Administrative Code § 116.116(b) and § 116.160 [30 TAC § 116.116(b) and § 116.160], and based on our review, Permit Number 81903 is hereby amended. This information will be incorporated into the existing permit file. Enclosed are revised special conditions pages and a maximum allowable emission rates (MAERT) table to replace those currently attached to your permit. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met.

Planned maintenance, startup, and shutdown for the sources identified on the MAERT have been reviewed and included in the MAERT and specific maintenance activities are identified in the permit special conditions. Any other maintenance activities are not authorized by this permit and will need to obtain separate authorization.

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory

Ms. Kim Stoker  
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December 6, 2011

Re: Permit Number: 81903 and PSDTX1095

Accreditation Program or meet one of several exemptions. Specific information concerning which laboratories must be accredited and which are exempt may be found in 30 TAC § 25.4 and § 25.6.

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Web site:

[www.tceq.texas.gov/compliance/compliance\\_support/qa/env\\_lab\\_accreditation.html](http://www.tceq.texas.gov/compliance/compliance_support/qa/env_lab_accreditation.html)

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at [labprgms@tceq.texas.gov](mailto:labprgms@tceq.texas.gov).

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission should review the executive director's decision. According to 30 TAC § 50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 11 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code § 382.032, a person affected by the executive director's approval must file a petition appealing the executive director's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Mr. Marc Sturdivant at (512) 239-1313 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Ms. Kim Stoker  
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December 6, 2011

Re: Permit Number: 81903 and PSDTX1095

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Wilson", followed by a small "for" in cursive.

Michael Wilson, P.E., Director  
Air Permits Division  
Office of Air  
Texas Commission on Environmental Quality

MPW/MS/

Enclosures

cc: Air Section Manager, Region 13 - San Antonio  
Air Permits Section Chief, New Source Review, Section (6PD-R), U.S. Environmental  
Protection Agency, Region 6, Dallas

Project Number: 162509





# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



*A PERMIT IS HEREBY ISSUED TO*  
**City Public Service**  
*AUTHORIZING THE CONSTRUCTION AND OPERATION OF*  
**V H Braunig A Von Rosenberg Power Plant**  
**LOCATED AT Elmendorf, Bexar County, Texas**  
**LATITUDE 29° 15' 27" LONGITUDE 098° 22' 58"**

1. **Facilities covered by this permit** shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting, Remediation, and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. **Emissions from this facility** must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMIT 81903

Date: September 5, 2008

  
For the Commission

## **Special Conditions**

Permit Numbers 81903 and PSDTX1095

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits shall be based on a rolling 12-month year rather than the calendar year. This permit authorizes maintenance, start-up, and shutdown (MSS) activities which comply with the emission limits in the maximum allowable emission rates table (MAERT).

### **Federal Applicability**

2. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations (40 CFR) Part 60 on Standards of Performance for New Stationary Sources promulgated for:
  - A. Applicable General Conditions, Subpart A.
  - B. The gas turbines are subject to the applicable requirements of Subpart KKKK titled Standards of Performance for Stationary Combustion Turbines.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

### **Emissions Standards and Operating Specifications**

3. The four General Electric LM 6000 Simple Cycle Turbine Generators (Emission Point Nos. (EPNs) CGT5 through CGT8) units authorized by this permit are rated for a nominal electric power output of 50 MW each and will have a combined nominal generating capacity of 200 MW. All proposed turbines will be fired primarily with natural gas and use fuel oil as backup.
4. The concentration of nitrogen oxides (NO<sub>x</sub>) in the stack gases from EPNs CGT5 to CGT8 shall not exceed a three-hour rolling average of 5 parts per million by volume dry corrected (ppmvd) to 15 percent oxygen O<sub>2</sub> when firing natural gas and 16 ppmvd @ 15 percent O<sub>2</sub> when firing fuel oil.

The concentration of carbon monoxide (CO) in the stack gases from EPNs CGT5 to CGT8 shall not exceed a three-hour rolling average of 9 ppmvd @ 15 percent O<sub>2</sub> when firing natural gas or fuel oil.

The concentrations above apply over each turbine's normal operating range of 50 to 100 percent of full load and do not apply during periods of startup or shutdown.

Reduced load operation below 50 percent of base load, start-up, and shutdown emissions are authorized, provided that the maximum pounds per hour (lb/hr) emission rates specified in the MAERT are not exceeded.

5. Fuel for the gas turbines shall be pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet (dscf) on an hourly basis, and 0.5 grain total sulfur per 100 dscf on an annual basis. Each gas turbine is authorized to fire fuel oil containing no more than 0.05 weight percent sulfur for 720 hours per year.

The Emergency Generator (EPN EMGEN1) is authorized to fire diesel fuel containing no more than 0.05 percent sulfur by weight and is limited to a maximum of 500 hours of operation annually.

Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired or shall allow air pollution control agency representatives to obtain a sample for analysis.

6. Except during MSS activities, the opacity shall not exceed five percent averaged over a six-minute period from each stack or vent. During MSS activities, the opacity shall not exceed 15 percent (or other applicable opacity limit specified in 30 TAC § 111.111(a)(1)(c)). Each determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent during normal operations or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. Continuous compliance with this special condition shall be demonstrated by firing the approved fuel outlined in Special Condition No. 5. (12/11)

### **Emission Reduction and Netting**

7. The permit holder will net out of PSD review for NO<sub>x</sub> by capping turbines (CGT5-CGT8 and Boiler E-2). The reduction of emissions relied upon for netting shall occur not later than the commencement of operation of the new simple cycle turbines. This permit establishes an annual cap for NO<sub>x</sub> based solely upon the baseline actual emissions from Boiler E-2 (authorized in permit 45641) to limit the combined emissions of the new facility and the Boiler. The permit holder shall control NO<sub>x</sub> emissions such that the combined total emissions from turbines CGT5 to CGT8 and Boiler E-2 shall not exceed 174.96 tons per year of NO<sub>x</sub>.

### **Aqueous Ammonia (NH<sub>3</sub>)**

8. Concentrations of NH<sub>3</sub> from EPNs CGT5 to CGT8 shall not exceed 7 ppmvd when corrected to 15 percent O<sub>2</sub> on a three-hour rolling average.
9. The permit holder shall maintain prevention and protection measures for the NH<sub>3</sub> storage system which includes (but is not limited to) the following:

The NH<sub>3</sub> storage tank area will be marked and protected so as to protect the NH<sub>3</sub> storage tank from accidents that could cause a rupture.

10. In addition to the requirements of Special Condition No. 9, the permit holder shall maintain the piping and valves in NH<sub>3</sub> service as follows:
  - A. All operating practices and procedures relating to the handling and storage of NH<sub>3</sub> shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.
  - B. Audio, olfactory, and visual checks for NH<sub>3</sub> leaks within the operating area shall be made once per day.
  - C. As soon as practicable, following detection of the leak, plant personnel shall take one or more of the following actions:
    - (1) Locate and isolate the leak, if necessary.
    - (2) Commence repair or replacement of the leaking component.

- (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

### **Planned Maintenance Start-up and Shutdown (MSS)**

- 11. The emissions from MSS activities are reflected in the MAERT. These emissions will be minimized by the following:
  - A. Facility and air pollution control equipment will be operated in a manner consistent with good practices for minimizing emissions.
  - B. The frequency and duration of operation in MSS mode will be minimized and the applicable emission monitoring will be kept in operation.
  - C. The emission limits in Special Condition No. 4 do not apply when EPNs CGT5, CGT6, CGT7 and CGT8 are operating during MSS conditions. During these operations, CGT5, CGT6, CGT7 and CGT8 shall comply with the emission limits specified on the MAERT. Cold start-up events shall not exceed five hours in duration. Warm start-up events shall not exceed three hours in duration. Shutdown events shall not exceed two hours in duration. A cold start-up event is defined as a start-up after a unit has received no fuel flow for a period of 24-hours or more. A warm start-up event is defined as a start-up which is not a cold start-up. A startup commences when the startup sequence is initiated by an operator and is complete when the turbines' CEMS is Calibrated. A shutdown commences once the shutdown sequence is initiated by an operator and is complete when the fire is out of the combustion turbine. **(12/11)**
  - D. During warm start-up periods, the start-up emission limits in the MAERT also apply during periods when the unit is transitioning from one fuel to the other. **(12/11)**
  - E. Start-up and shutdown is authorized provided that the emissions rates in pounds per hour (lbs/hr) do not exceed those specified in the MAERT.
- 12. Site-wide planned MSS activities identified as inherently low emitting (ILE) or non-ILE can be found in Attachment A and Attachment B of permit number 38183. **(12/11)**
  - A. Emissions from non-ILE activities, including but not limited to combustion tuning shall not exceed the mass emission rates represented for MSS found on the MAERT.
  - B. Planned site-wide Miscellaneous Maintenance Activities (EPN MSSFUG) are identified on the MAERT for Permit No. 38183

13. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions. **(12/11)**

### **Initial Determination of Compliance**

14. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ San Antonio Regional Director.
15. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs CGT5 to CGT8. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods 201A and 202 or Reference Method 5, modified for the concentration of PM<sub>10</sub>; Reference 9 for opacity (consisting of 30 six-minute readings as provided in 40 CFR § 60.11[b]); Reference Method 10 for the concentration of CO; Reference Method 25A, modified to exclude methane and ethane, for the concentrations of VOC (to measure total carbon as propane; and Reference Method 20 for the concentrations of NO<sub>x</sub> and O<sub>2</sub> or equivalent methods.

Fuel sampling using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for SO<sub>2</sub>. If fuel sampling is used, compliance with New Source Performance Standards (NSPS), Subpart KKKK SO<sub>2</sub> limits shall be based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ San Antonio Regional Office shall be contacted as soon as testing is scheduled but not less than 30 days prior to sampling to schedule a pretest meeting. The notice shall include:
  - (1) Date for pretest meeting.
  - (2) Date sampling will occur.
  - (3) Name of firm conducting sampling.

- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ San Antonio Regional shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any air contaminant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have EPA approval.

- B. Air contaminants and diluents from the turbines to be sampled and analyzed include NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, NH<sub>3</sub>, opacity, and O<sub>2</sub>. [As noted above, fuel sampling using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for SO<sub>2</sub>].
- C. Each turbine shall be tested at 50 and 100 percent of base load for the atmospheric conditions which exist during testing. Each tested turbine load shall be identified in the sampling report. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in 40 CFR Part 60, Subpart KKKK.
- D. Sampling as required by this condition shall occur within 60 days after achieving the maximum production but no later than 180 days after initial start-up of each unit. Additional sampling shall occur as may be required by the TCEQ or EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows:

One copy to the EPA Region 6 Office, Dallas.  
One copy to the TCEQ San Antonio Regional Office.

### **Continuous Determination of Compliance**

16. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of NO<sub>x</sub> and CO from EPNs CGT5 to CGT8. Diluents to be measured include O<sub>2</sub> or CO<sub>2</sub>. The CEMS data shall be used to determine continuous compliance with the NO<sub>x</sub> and CO emission limitations in Special Condition No. 4 and the attached MAERT. The CEMS shall be operated according to the methods and procedures as set out in 40 CFR § 60.4345. Reporting of monitoring data shall be in accordance with methods and procedures as set out in 40 CFR § 60.7. Compliance with the continuous emissions monitor requirements above can be demonstrated by meeting the requirements of 40 CFR Part 75 provided that the holder of this permit demonstrates compliance with all applicable NSPS regulations.
17. The holder of this permit shall install, maintain, and operate continuous monitoring systems to monitor and record the hourly natural gas and fuel oil consumption from EPNs CGT5 to CGT8. The fuel firing rates multiplied by either a) emission factors developed from source specific stack tests, or b) emission factors that serve as the basis of the permit, shall be used to demonstrate compliance with the VOC, SO<sub>2</sub>, PM/PM<sub>10</sub> and H<sub>2</sub>SO<sub>4</sub> emission limits in the attached MAERT from EPNs CGT5 to CGT8.
18. The NH<sub>3</sub> concentration in each Exhaust Stack (EPNs CGT5 to CGT8) shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below.
  - A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NH<sub>3</sub>. The NH<sub>3</sub> concentrations shall be corrected and reported in accordance with Special Condition No. 8.
  - B. As an approved alternative, the NH<sub>3</sub> slip may be measured using a sorbent or stain tube device specific for NH<sub>3</sub> measurement in the 5 to 10 ppm range. The frequency of sorbent or stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to testing every other week if operating procedures have been developed to prevent excess amounts of NH<sub>3</sub> from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling NH<sub>3</sub> slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. These results shall be recorded and used to determine compliance with Special Condition No. 8.
  - C. As an approved alternative to sorbent or stain tube testing or an NH<sub>3</sub> CEMS, the permit holder may install and operate a second NO<sub>x</sub> CEMS probe located upstream of the SCR, which may be used in association with the SCR efficiency and NH<sub>3</sub> injection rate to



Special Conditions

Permit Numbers 81903 and PSDTX1095

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estimate  $\text{NH}_3$  slip. This condition shall not be construed to set a minimum  $\text{NO}_x$  reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 8.

- D. If the sorbent or stain tube testing indicates an ammonia slip concentration which exceeds five parts per million (ppm) at any time, the permit holder shall begin  $\text{NH}_3$  testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis in addition to the weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates  $\text{NH}_3$  slip is four ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent or stain tube testing again indicate five ppm  $\text{NH}_3$  slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 8.
- E. As an approved alternative to sorbent or stain tube testing,  $\text{NH}_3$  CEMS, or a second  $\text{NO}_x$  CEMS, the permit holder may install and operate a dual stream system of  $\text{NO}_x$  CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one  $\text{NO}_x$  CEMS, and the other exhaust stream would be routed through a  $\text{NH}_3$  converter to convert  $\text{NH}_3$  to  $\text{NO}_x$  and then to a second  $\text{NO}_x$  CEMS. The  $\text{NH}_3$  slip concentration shall be calculated from the delta between the two  $\text{NO}_x$  CEMS readings (converted and unconverted). These results shall be recorded and used to determine compliance with Special Condition No. 8.

Any other method used for measuring  $\text{NH}_3$  slip shall require prior approval from the TCEQ Regional Director.

- 19. The holder of this permit shall record the monthly operating hours for EPN EMGEN1. The operating hours multiplied by emission factors that serve as the basis of the permit shall be used to demonstrate continuous compliance with annual emission limitations in the attached MAERT for this source. Continuous compliance with the hourly emission limitations in the attached MAERT for this source is demonstrated as long as the nameplate horsepower (hp) rating on the engine does not exceed 1,333 hp.
- 20. The permit holder shall record the monthly tank levels for the two diesel tanks (EPNs TK-DSL1) and (TK-DSL2)]. Continuous compliance with the hourly and annual emission limitations in the attached MAERT for these sources is demonstrated by limiting the products stored in these tanks to diesel fuel.
- 21. Emissions from EPNs CGT-LOV and FUG-CGT are fugitive in nature and estimates only. Continuous demonstration of compliance with the emission limitations for these sources in the attached MAERT is not required.

### **Recordkeeping Requirements**

22. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
  - A. A copy of this permit.
  - B. Permit application dated May 2007 and subsequent representations submitted to the TCEQ.
  - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 15 to demonstrate initial compliance.
  - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
23. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
  - A. CEMS emissions data for NO<sub>x</sub>, CO, and diluent gases (O<sub>2</sub> or CO<sub>2</sub>) to demonstrate compliance with the emission rates listed in the MAERT.
  - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.
  - C. Records of the hours of operation of the Emergency Generator pursuant to Special Condition No. 19.
  - D. Records of the hours of operation and monthly quantities of fuels fired in the turbines pursuant to Special Condition No.17.
  - E. Records of fuel sampling conducted pursuant to 40 CFR Part 60, Subpart KKKK.
  - F. Records of NH<sub>3</sub> emissions sampling and calculations pursuant to Special Condition No. 18.

- G. Written records of any accidental releases, spills, or venting of NH<sub>3</sub> and the corrective action taken.
- H. Written records of maintenance performed to any piping and valves in NH<sub>3</sub> service pursuant to Special Condition No. 10.
- I. Records to identify the times when emissions data have been excluded from the calculation of average concentration because of reduced load, start-up and shutdown pursuant to Special Condition No.4 along with the justification for excluding data.
- J. A 12-month rolling record of total NO<sub>x</sub> emissions from the EPNs listed in the MAERT under the NO<sub>x</sub> cap.
- K. Records of the tank levels and type of fuel stored in the two diesel tanks (EPNs TK-DSL1 and TK-DSL2) pursuant to Special Condition 20.
- L. Records of quarterly opacity observations as required by Special Condition No. 6. **(12/11)**
- M. A log of all startups and shutdowns and durations to demonstrate compliance with Special Condition No. 11. **(12/11)**

## **Reporting**

- 24. The holder of this permit shall submit to the TCEQ San Antonio Regional Office and the Air Enforcement Branch of the EPA in Dallas semiannual reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of excess emissions and CEMS downtimes by cause.

Dated December 6, 2011

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 81903 and PSDTX1095

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

## Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
CGT5, CGT6, CGT7, CGT8, E-2 (5)	Total Cap for NO <sub>x</sub> all 5 EPNs	NO <sub>x</sub>	-	174.96
CGT5, CGT6, CGT7, CGT8 (6)	GE LM 6000 (50 MW) Natural Gas (up to 4750 hr/yr)	NO <sub>x</sub>	9.09	-
		NO <sub>x</sub> (MSS) (8)	150.30	-
		CO	9.96	-
		CO (MSS) (8)	885.0	-
		VOC	1.90	-
		VOC (MSS) (8)	14.80	-
		PM/PM <sub>10</sub>	8.0	-
		SO <sub>2</sub>	6.46	-
		NH <sub>3</sub>	4.70	-
		H <sub>2</sub> SO <sub>4</sub>	0.49	-
	Fuel Oil (up to 720 hr/yr)	NO <sub>x</sub>	29.29	-
		NO <sub>x</sub> (MSS) (8)	207.40	-
		CO	10.03	-
		CO (MSS) (8)	891.0	-
		VOC	2.55	-
		VOC (MSS) (8)	14.9	-
		PM/PM <sub>10</sub>	30.0	-
		SO <sub>2</sub>	23.04	-
		NH <sub>3</sub>	4.74	-
		H <sub>2</sub> SO <sub>4</sub>	17.63	-

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
CGT5, CGT6, CGT7, CGT8 (7)	Annual Emissions (Natural Gas/Fuel Oil) (4750 hr/yr)	NO <sub>x</sub>	-	28.90
		CO	-	23.70
		VOC	-	4.70
		PM/PM <sub>10</sub>	-	26.90
		SO <sub>2</sub>	-	9.60
		NH <sub>3</sub>	-	11.20
		H <sub>2</sub> SO <sub>4</sub>	-	7.30
EMGEN1	Emergency Generator (1,333-hp)	NO <sub>x</sub>	31.99	8.0
		CO	7.33	1.83
		VOC	0.94	0.23
		PM/PM <sub>10</sub>	0.93	0.23
		SO <sub>2</sub>	0.54	0.13
CGT-LOV	Combustion Turbine Lube Oil Vents	PM <sub>10</sub>	0.03	0.11
FUG-CGT	Plant Fugitives	VOC	0.21	0.93
		NH <sub>3</sub>	0.02	0.10
TK-DSL1	Diesel Tank 1 (combustion turbines)	VOC	4.90	0.37
TK-DSL2	Diesel Tank 2 (emergency generator)	VOC	0.082	0.001

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented

PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented

CO - carbon monoxide

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

Emission Sources - Maximum Allowable Emission Rates

NH<sub>3</sub> - ammonia

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Cap based upon the baseline actual emissions for Boiler E-2 (authorized by Permit Number 45641).
- (6) Pounds per hour - apply to each turbine.
- (7) Tons per year – apply to each turbine and include normal operation, maintenance, start-up, and shutdown.
- (8) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, during any clock hour that includes one or more minutes of planned MSS activities, the pollutant's hourly emission limits that apply during planned MSS activities shall apply during that clock hour.

Date: December 6, 2011



## Texas Commission on Environmental Quality Air Quality Permit

*A Permit Is Hereby Issued To*  
**City Public Service**  
*Authorizing the Construction and Operation of*  
**V H Braunig A Von Rosenberg Plant**  
*Located at Elmendorf, Bexar County, Texas*  
Latitude 29° 15' 27" Longitude -98° 22' 58"

Permit: 38183 and PSDTX907

Revision Date: December 22, 2015

Expiration Date: July 24, 2018

A handwritten signature in black ink, appearing to read "R. D. A. Hyle".

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]<sup>1</sup>
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling

facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled “Emission Sources--Maximum Allowable Emission Rates.” [30 TAC § 116.115(b)(2)(F)]<sup>1</sup>
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to “air pollution” as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.<sup>1</sup>

<sup>1</sup> Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.



## **Special Conditions**

Permit Nos. 38183 and PSDTX907

### **Emission Standards and Operating Specifications**

1. The combined cycle power plant authorized by this permit consists of two combustion gas turbines (CT) each rated for an electrical power output of 207 megawatts; two heat recovery steam generators (HRSG), each with associated duct burners (DB) rated at 166.7 million Btu per hour; and one steam turbine generator. **(12/15)**
2. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on any consecutive 12-month period. This permit authorizes planned maintenance, startup, and shutdown (MSS) activities which comply with the emission limits in the maximum allowable emission rates table (MAERT). **(12/11)**
3. Each CT is expected to normally operate at 100 percent (base) load except for periods of start-up, shutdown, or malfunction. Reduced load operation between 60 and 100 percent of base load is authorized to accommodate periods of reduced system load provided the maximum pounds per hour (lbs/hr) emission rates specified in the attached table entitled "Emission Sources-Maximum Allowable Emissions Rates" for Emission Point Nos. (EPNs) E5 and E6 are not exceeded. (EPNs E5 and E6 are also referred to as the "CT-HRSG stacks" in this permit.)
4. Fuel for the CT and DB is limited to pipeline-quality natural gas containing no more than 1.0 grain total sulfur per 100 dry standard cubic feet on an annual average basis and 10 grains total sulfur per 100 dry standard cubic feet on an hourly basis.
5. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program with jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel-fired in the CT and DB, or shall allow air pollution control agency representatives to obtain a sample for analysis.
6. Gas turbine and DB emissions out of the CT-HRSG Stacks (EPNs E5 and E6) shall not exceed the following concentration limits, in parts per million by volume on a dry basis (ppmvd).
  - A. Emissions of nitrogen oxides (NO<sub>x</sub>) shall not exceed 9.0 ppmvd when corrected to 15 percent oxygen (O<sub>2</sub>) at any operating load, except during periods of planned maintenance, start-up, or shutdown (MSS). **(12/11)**
  - B. Emissions of carbon monoxide (CO) shall not exceed 26 ppmvd when corrected to 15 percent O<sub>2</sub> at any operating load except during periods of MSS. **(12/11)**
  - C. Emissions of volatile organic compounds (VOC) shall not exceed 7 ppmvd when corrected to 15 percent O<sub>2</sub> at any operating load except during periods of MSS. **(12/11)**

- D. Emissions of ammonia ( $\text{NH}_3$ ) shall not exceed 5 ppmvd on an annual average basis nor 10 ppmvd on a maximum hourly basis when corrected to 15 percent  $\text{O}_2$  at any operating load except during periods of MSS. **(12/11)**
- 7. The ammonia handled at the plant shall be in solution and the solution shall contain no more than 30 percent ammonia by volume.
- 8. The DBs associated with the HRSGs are each limited to a maximum hourly heat input rate of 166.7 million British thermal units per hour (MMBtu/hr) based on the higher heating value of natural gas. Additionally, each DB is limited to firing no more than 236,870 MMBtu per year.
- 9. Except during MSS activities, the opacity from EPNs E5 and E6 shall not exceed five percent averaged over a six-minute period from each stack or vent. During MSS activities, the opacity shall not exceed 15 percent (or other applicable opacity limit specified in 30 TAC § 111.111(a)(1)(c)). Each determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent during normal operations or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. **(12/11)**

### **Federal Applicability**

- 10. These facilities shall comply with applicable requirements of the EPA Regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart A, General Conditions, and the following:
  - A. The DB-fired HRSGs are subject to the applicable requirements of Subpart Db, Standards of Performance for Electric Utility Steam Generating Units.
  - B. The CT are subject to the applicable requirements of Subpart GG, Standards of Performance for Stationary Gas Turbines.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

### **Initial Determination of Compliance**

- 11. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack

Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.

12. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs E5 and E6. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ and in accordance with appropriate EPA Reference Methods or Sampling Procedures Manual approved equivalent methods. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

Fuel sampling using the methods and procedures of 40 CFR 60.335(d) may be conducted in lieu of stack sampling for sulfur dioxide (SO<sub>2</sub>). If fuel sampling is used, compliance with New Source Performance Standards (NSPS) Subpart GG SO<sub>2</sub> limits shall be based on 100 percent conversion of the sulfur in the fuel to SO<sub>2</sub>.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ San Antonio Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Sampling methods to be used for each air contaminant.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- B. Air contaminants and diluents to be sampled and analyzed include (but are not limited to) NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, particulate matter equal to or less than 10 microns in

diameter, NH<sub>3</sub>, opacity, and O<sub>2</sub>. (As noted above, fuel sampling using the methods and procedures of 40 CFR 60.335[d] may be conducted in lieu of stack sampling for SO<sub>2</sub>).

- C. Each CT shall be tested at a minimum of four points in the permitted operating range that is defined in Special Condition No. 3, including the minimum point in the range and at full load for the atmospheric conditions which exist during testing. The DB shall be tested at its maximum firing rate while the turbine is operating as close to base load as possible. Each tested turbine load shall be identified in the sampling report. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in NSPS Subparts Db and GG.
- D. Sampling as required by this condition shall occur within 60 days after achieving the maximum fuel-firing rate at which the CT and DB will be operated but no later than 180 days after initial start-up. Requests for an extension of this schedule shall be made in writing to and approved by the Director of the TCEQ San Antonio Regional Office. Additional sampling shall occur as may be required by the TCEQ or EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, four copies of the sampling reports shall be distributed as follows:
  - One copy to the TCEQ San Antonio Regional Office.
  - One copy to the TCEQ Office of Air, Air Permits Division, Austin.
  - One copy to the EPA Region 6 Office, Dallas.

### **Continuous Determination of Compliance for CO and NO<sub>x</sub>**

- 13. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of NO<sub>x</sub>, CO, and diluent from each CT-HRSG Stack (EPNs E5 and E6).
  - A. Monitored NO<sub>x</sub> and CO concentrations shall be corrected and reported in dimensional units corresponding to the emission rate and concentration limits established for the CT and HRSG DB in this permit.
  - B. Each CEMS shall meet the applicable quality-assurance requirements specified in 40 CFR 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
  - C. The monitoring data shall be reduced to hourly average values at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.

- D. All monitoring data and quality-assurance data shall be maintained by the permit holder for a period of two years and shall be made available to the TCEQ Executive Director or his designated representative upon request. The data from each CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
  - E. The TCEQ San Antonio Regional Office shall be notified at least 21 days prior to any required relative accuracy test audit in order to provide them the opportunity to observe the testing.
  - F. If applicable, each CEMS will be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR 75, Appendix A.
14. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after failure was first detected by any employee at the facility, unless written permission is obtained from the TCEQ San Antonio Regional Office which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.

#### **Other Compliance Conditions**

15. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the CT and DB. The systems shall be accurate to  $\pm 5.0$  percent of the units maximum flow.
16. The holder of this permit shall monitor the fuel fired in the CT authorized by this permit for fuel-bound sulfur as specified in 40 CFR 60.334(b). Any request for a custom monitoring schedule shall be made in writing and directed to the Executive Director of the TCEQ, although authority for granting such custom schedules remains with the EPA. Any custom schedule approved by EPA pursuant to 40 CFR 60.334(b) will be recognized as enforceable conditions of this permit provided that the holder of this permit demonstrates that the conditions of such custom schedule will be adequate to demonstrate continuous compliance with Special Condition No. 4.
17. The  $\text{NH}_3$  concentration in each CT-HRSG Exhaust Stack (EPNs E5 and E6) shall be tested or calculated according to the method and frequency listed below. Testing for  $\text{NH}_3$  slip is only required on days when the selective catalytic reduction (SCR) unit is in operation (i.e., when its operation is necessary to meet permit emission rate and concentration limits).
- A. The  $\text{NH}_3$  slip may be measured using a sorbent or stain tube device specific for  $\text{NH}_3$  measurement in the 5 to 10 ppm range. The frequency of sorbent/stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be

reduced to weekly testing if operating procedures have been developed to prevent excess amounts of  $\text{NH}_3$  from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling  $\text{NH}_3$  slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy.

- B. As an approved alternative to sorbent or stain tube testing, the permit holder may install and operate a second  $\text{NO}_x$  CEMS probe located between the DBs and the SCR, upstream of the stack  $\text{NO}_x$  CEMS, which may be used in association with the SCR efficiency and  $\text{NH}_3$  injection rate to estimate  $\text{NH}_3$  slip. This condition shall not be construed to set a minimum  $\text{NO}_x$  reduction efficiency on the SCR unit.
  - C. If the measured or calculated ammonia slip concentration exceeds 8 ppm at any time, the permit holder shall begin  $\text{NH}_3$  testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis, in addition to the weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates  $\text{NH}_3$  slip is 5 ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent/stain tube testing again indicate 8 ppm  $\text{NH}_3$  slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 5.D.
  - D. Any other method used for measuring  $\text{NH}_3$  slip shall require prior approval from the TCEQ Regional Director.
18. The holder of this permit shall develop a program to calculate the total mass flow rate (in tons per year) of  $\text{NO}_x$ , CO, and  $\text{SO}_2$  through the CT-HRSG stacks to ensure continuous compliance with the emission limitations specified in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates." The program shall perform as follows:
- A. The exhaust emissions from EPNs E5 and E6 shall be calculated hourly in units of lb/hr using a measured or calculated volumetric flow rate as provided for by EPA Reference Method 19, measured natural gas flow rates, fuel higher heating value, fuel sulfur content, and the concentrations of  $\text{NO}_x$  and CO measured by the CEMS.
  - B. The calculated hourly  $\text{NO}_x$ , CO, and  $\text{SO}_2$  emissions (lbs/hr) shall be summed monthly to tons per year and used to determine compliance with the annual emission limits of the permit.

This data shall be stored on a computer hard drive and on computer disk or other TCEQ-accepted computer media. Records of this information will also be available in a form suitable for inspection.

#### **Planned Maintenance Startup and Shutdown (MSS)**

19. This permit authorizes the emissions from the planned maintenance, startup, and shutdown (MSS) activities listed in Attachment A, Attachment B, or the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned

maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned maintenance activities that are non-ILE planned maintenance activities that this permit authorizes to be performed. **(12/11)**

20. When a planned maintenance activity identified in Attachment B is associated with a VOC liquid storage facility and may result in VOC emissions from that facility, the permit holder shall not open that facility to the atmosphere in connection with the planned maintenance activity until the VOC liquids are removed from that facility to the maximum extent practicable. **(12/11)**
21. The holder of this permit shall minimize emissions MSS activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility. **(12/11)**
22. Emissions of MSS activities will be minimized by limiting the duration of operation in planned startup and shutdown mode as follows: **(12/11)**
  - A. A planned startup of the combined cycle generating units with EPN No. E5 and E6 is defined as the period that begins when the startup sequence is initiated and is complete when the turbine reaches 70 MW as well as gas flowing through all 6 fuel nozzles for each of the 14 combustion cans. A planned startup for EPNs E5 and E6 shall not exceed seven hours for cold start-ups and shall not exceed five hours for a warm start-up. A cold startup is defined as a startup after the steam turbine temperature has decreased to less than 250 °F. A warm startup is defined as a startup which is not a cold startup.
  - B. A planned shutdown of the combined cycle generating units with EPN No. E5 and E6 is defined as the period that begins when the shutdown sequence is initiated and is complete when the fire is out of the combustion turbine. A planned shutdown for EPNs E5 and E6 shall not exceed two hours.
23. Compliance with the emissions limits for planned MSS activities identified in the MAERT attached to this permit may be demonstrated as follows.
  - A. For each pollutant emitted during ILE planned maintenance activities, the permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
  - B. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 24A, the permit holder shall do the following for each calendar month.
    - (1) Compare the pollutant's short-term (hourly) emissions during planned maintenance activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

- (2) Once the pollutant's emissions during planned maintenance activities have been measured by the CEMS for 12 months after the MSS permit amendment has been issued, compare the rolling 12-month emissions of the pollutant, as determined using the CEMS data, to the annual emissions limit in the MAERT.
  - C. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 24A, the permit holder shall do the following for each calendar month.
    - (1) Determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 23B.
    - (2) Once monthly emissions have been determined in accordance with Special Condition No. 23C(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the rolling 12-month emissions for the pollutant to the annual emissions limit in the MAERT.
  - D. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions do not occur through a stack, the permit holder shall do the following for each calendar month.
    - (1). Determine the total emissions of the pollutant from such non-ILE planned maintenance activities in accordance with Special Condition No. 23B.
    - (1) Once monthly emissions have been determined in accordance with Special Condition No. 24D(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall compare the sum of the rolling 12-month emissions for the pollutant for all non-ILE planned maintenance activities to the annual emissions limit for the pollutant in the MAERT.
- 24. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 23 as follows. **(12/11)**
  - A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
  - B. For each pollutant not described in Special Condition No. 24A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to,



any of the methods described in paragraphs 1 through 4 below, provided that the permit holder maintains appropriate records supporting such determination:

- (1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.
  - (2) Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
  - (3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
  - (4) Use of parametric emissions monitoring system (PEMS) data applicable to the facility.
25. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions.

### **Recordkeeping Requirements**

26. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
- A. A copy of this permit.
  - B. Permit application dated April 20, 1998 and subsequent representations submitted to the TCEQ.
  - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 12 to demonstrate initial compliance.
  - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
27. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of two years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:
- A. The CEMS data of NO<sub>x</sub>, CO, and O<sub>2</sub> (or other diluent) emissions, as well as all other data required to comply with Special Condition Nos. 17 and 18.

- B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems in a permanent form suitable for inspection.
- C. Records of daily fuel consumption for each CT and DB.
- D. Records of the annual quantity of natural gas fired in each DB, along with the higher heating value of the natural gas fuel.
- E. Records of quarterly opacity observations as required by Special Condition No. 9. **(12/11)**
- F. A log of all startups and shutdowns and durations to demonstrate compliance with Special Condition No. 22. **(12/11)**
- G. Documentation of emissions from planned MSS activities in accordance with Special Condition 22 and Special Condition 24. **(12/11)**

## Reporting

- 28. The holder of this permit shall submit to the TCEQ San Antonio Regional Office; and, if requested, the Air Enforcement Branch of EPA in Dallas quarterly reports as described in 40 CFR 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. In addition to the information specified in 40 CFR 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of noncomplying emissions and CEMS downtimes by cause.
- 29. For the purposes of reporting pursuant to Special Condition No. 28, noncomplying emissions from equipment authorized by this permit shall be defined as follows:
  - A. Noncomplying emissions of NO<sub>x</sub> and CO shall be defined as each one-hour period of operation (except during start-up or shutdown) during which the average emissions as measured and recorded by the CEMS exceed corresponding concentration limits set in these permit conditions or, when converted to lb/hr, the mass rate limits specified in the maximum allowable emission rates table (MAERT).
  - B. Noncomplying annual emissions shall be defined as any rolling 12-month period of operation during which the 12-month cumulative emissions exceeds the annual limits specified in the MAERT of this permit
  - C. Noncomplying emissions of SO<sub>2</sub> shall be defined as emissions resulting from firing fuel containing sulfur in excess of the limits in Special Condition No. 4, or as emissions in exceedance of the SO<sub>2</sub> lb/hr limitation in the MAERT based on 100 percent conversion of the sulfur in the fuel per computations required in Special Condition No. 18.
- 30. If the average NO<sub>x</sub> or CO stack outlet emission rate exceeds the corresponding maximum allowable emission rate for more than one hour, the holder of this permit shall investigate

and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible.

If the NO<sub>x</sub> or CO emission rate exceeds the corresponding limit in the MAERT for more than 24 consecutive hours, the permit holder shall notify the appropriate TCEQ Regional Office either verbally or in writing detailing the cause of the exceedance and all efforts being made to correct the problem.

Date: December 22, 2015

## Attachment A

Permit No. 38183 and PSDTX907

### Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activity	Emissions					
	NH <sub>3</sub>	VOC	NO <sub>x</sub>	CO	PM	SO <sub>2</sub>
Water-based washing		X				
Miscellaneous particulate filter maintenance <sup>1</sup>					X	
Degassing for maintenance of storage vessels storing material with vapor pressure <0.5 psia	X	X				
Catalyst handling and maintenance <sup>2</sup>					X	
Management of sludge from pits, ponds, sumps, and water conveyances <sup>3</sup>		X				
Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment, process instruments including sight glasses, meters, gauges, CEMS.		X	X	X		X
Small equipment and fugitive component repair/replacement in VOC and NH <sub>3</sub> service <sup>4</sup>	X	X				

Date: December 6, 2011

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<sup>1</sup> Includes, but is not limited to, baghouse filters, process-related building air filters, and combustion turbine air intake filters.

<sup>2</sup> Includes, but is not limited to, replacement, cleaning, activation, and deactivation of SCR and oxidation catalysts.

<sup>3</sup> Includes, but is not limited to, management by vacuum truck/dewatering of materials in sumps, tanks and other closed or open vessels. Materials managed include water and sludge mixtures containing miscellaneous VOCs such as diesel, lube oil, and other waste oils.

<sup>4</sup> Includes, but is not limited to, (i) repair/replacement of pumps, compressors, valves, pipes, flanges, transport lines, filters and screens in natural gas, fuel oil, diesel oil, ammonia, lube oil, and gasoline service, (ii) vehicle and mobile equipment maintenance that may involve small VOC emissions, such as oil changes, transmission service, and hydraulic system service, and (iii) off-line NO<sub>x</sub> control device maintenance (including maintenance of the anhydrous ammonia systems and aqueous ammonia systems associated with SCR systems)

## Attachment B

Permit No. 38183 and PSDTX907  
Non-ILE Planned Maintenance Activities

Planned Maintenance Activity	EPN	Emissions*					
		NH <sub>3</sub>	VOC	NO <sub>x</sub>	CO	PM	SO <sub>2</sub>
Combustion optimization <sup>1</sup>	E5 and E6		x	x	x	x	x
Degassing for maintenance of storage vessels storing gasoline or other material with vapor pressure >0.5 psia that requires clearing of the vessels to allow for entry of personnel	MSSFUG	x	x				
NO <sub>x</sub> control device maintenance – unit online	E5 and E6	x		x			
Testing of oil guns <sup>2</sup>	E5 and E6		x	x	x	x	x

\*Emissions will not exceed the mass emission rates represented for start-up on the MAERT

Date: December 6, 2011

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<sup>1</sup> Includes, but is not limited to, (i) leak and operability checks (e.g., turbine over-speed tests, troubleshooting), (ii) balancing, and (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances

<sup>2</sup> Includes readiness testing for oil firing system.

## Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 38183 and PSDTX907

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

### Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
E5	Combustion Gas Turbine (5) 186 MW Output and HRSG w/166.7 MMBtu/hr Duct Burner	NO <sub>x</sub>	68.7	271.2
		NO <sub>x</sub> (MSS)(5)	687.00	-
		CO	124.8	480.4
		CO(MSS)(5)	2000.00	-
		SO <sub>2</sub>	58.3	23.8
		VOC	18.5	48.1
		PM/PM <sub>10</sub>	26.5	88.6
		NH <sub>3</sub>	28.2	57.6
E6	Combustion Gas Turbine (5) 186 MW Output and HRSG w/166.7 MMBtu/hr Duct Burner	NO <sub>x</sub>	68.7	271.2
		NO <sub>x</sub> (MSS)(5)	687.00	-
		CO	124.8	480.4
		CO(MSS)(5)	2000.00	-
		SO <sub>2</sub>	58.3	23.8
		VOC	18.5	48.1
		PM/PM <sub>10</sub>	26.5	88.6
		NH <sub>3</sub>	28.2	57.6
PFUG	Piping Fugitives	VOC (6)	0.17	0.76

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
MSSFUG (7)	Maintenance Activities	VOC	14.27	0.05
		PM	65.65	0.20
		PM <sub>10</sub>	31.05	0.09
		PM <sub>2.5</sub>	4.70	0.01
		NO <sub>x</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		NH <sub>3</sub>	7.67	<0.01
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:				
92580				
CT01	Air Inlet Chillers EPN E5	VOC	0.29	1.30
		SO <sub>2</sub>	0.06	0.26
		CO	0.08	0.36
		NO <sub>x</sub>	0.59	2.59
		PM/PM <sub>10</sub>	0.77	3.38
92592				
CT02	Air Inlet Chillers EPN E6	VOC	0.04	0.16
		SO <sub>2</sub>	3.95	0.28
		CO	0.44	0.40
		NO <sub>x</sub>	3.96	2.71
		PM/PM <sub>10</sub>	0.59	2.27
		PM <sub>2.5</sub>	0.59	2.27

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		NH <sub>3</sub>	0.04	0.05

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide  
 NH<sub>3</sub> - ammonia
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, during any clock hour that includes one or more minutes of planned MSS activities, the pollutant's hourly emission limits that apply during planned MSS activities shall apply during that clock hour.
- (6) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (7) Planned site-wide Miscellaneous Maintenance Activities (EPN MSSFUG) for Permit No. 81903 are authorized under this MAERT.

Date: December 6, 2011